

the natural selectionist might be that at some previous time such adaptation had held, and this of course is unanswerable since we have no way of knowing what host plants may have been the home of the insects in bygone periods; but it is interesting to note that the genera *Ceresa* and *Telamona*, which now show little protective resemblance to parts of their hosts, are more numerous and apparently maintain an existence with greater ease than do those species that show very excellent protective resemblances.

"It is unnecessary to take up separately each of the local forms in this respect. For each it is possible to suggest an explanation, reasonable or otherwise according to the degree of imagination possessed. But in general it must be said for the local forms, as for the family as a whole, that such speculation merely lies in the realm of conjecture." (pp. 419-20).

The realm of conjecture is a vast domain, illimitable in fact, otherwise we should have, under the necessity of inventing a new infinity, to accommodate the unrestrained theorizing of the selectionists. Contact with the hard facts of what adaptations do and do not accomplish invariably removes the young and plastic naturalist from the thrall of protective adaptation doctrine. The reviewer has watched the course of this process in a number of cases of men beginning the work of analyzing the contents of bird stomachs. First, surprise is manifested that birds should eat things that college teaching has pronounced protected, then as other cases occur from time to time the old belief is entirely cast aside, and finally long experience leads to the conclusion that in their respective ecological niches birds feed practically indiscriminately.

To return to the Membracids, we must conclude that their protective adaptations have no especial significance in foiling predators. In Biological Survey investigations tree hoppers have been found in the stomachs of more than 120 species of birds, and in numbers up to 26 individuals in a single stomach. They have been found in 15 or more stomachs of each of the following species: Great-crested and Ash-throated Flycatchers, Meadow-lark, Brewer's Blackbird, Bullock's Oriole, English Sparrow, Cliff Swallow, Red-eyed, Solitary and Warbling Vireos, Bush-tit, and Ruby-crowned Kinglet. The tree hoppers identified belong to 21 different genera indicating that no partiality is shown. Membracids with the most prominent horns and spines of any in our fauna, as those of the genera *Campylenchia*, *Platycotis*, *Ceresa* and *Platycentrus* are taken with the rest.—W. L. M.

The Ornithological Journals.

Bird-Lore. XX, No. 2. March-April, 1918.

Some Notes on Martin Colonies. Five contributions from as many writers.

Notes on the Tree Swallow. By Verdi Burtch.

The Song Sparrow. A Poem by Edw. J. Sawyer.

How to Make and Erect Bird-Houses. By Hubert Prescott.

Photography of Feeding Stations. By C. Breder, Jr.

Holbøll's Grebe in Connecticut. By Wilbur F. Smith.

The Migration of certain Tanagers and Swallows is considered by Dr. Oberholser while Dr. Chapman treats of the plumages of the former, with a colored plate by Fuertes.

The Educational Leaflet describes the Raven.

Bird-Lore. XX, No. 3. May-June, 1918.

Three Years After. By Mable Osgood Wright.—An extremely interesting report on the condition of the Connecticut Audubon Society's 'Birdcraft Sanctuary.' During the season of 1917 there were 102 nests built on the grounds, belonging to 24 species. It was found necessary to destroy the English Sparrows, Starlings, Crows and Purple Grackles which visited the sanctuary. Traps with padded jaws were set for hawks, and all harmless species as well as owls were liberated. Northern Shrikes were found to be a serious menace to winter birds and striped snakes to nesting sparrows. The most serious enemy to the birds was the domestic cat, 107 of which were caught.

The Whip-poor-will. By Melicent E. Numason. A good account of its breeding.

My Nuthatch Tenants and a Pair of Red-headed Ruffians. By R. W. Williams.

The Waxwings and Phainopepla are treated in the usual papers on migration and plumage, with an excellent color plate by Fuertes.

The Condor. XX, No. 2. March-April, 1918.

In Memoriam: Lyman Belding. By Walter K. Fisher.

The Salt Marsh Yellowthroats of San Francisco. By George W. Schussler.

A Return to the Dakota Lake Region. By Florence M. Bailey.

Six Weeks in the High Sierras in Nesting Time. By Milton S. Ray.

The Scarlet Ibis in Texas. By R. A. Sell.—The unearthing of this important record was in part the result of criticism of a supposed sight record published in 'The Condor,' Vol. XIX, p. 46.

Both in this case and in that of the supposed Harpy Eagle published recently in 'The Auk' it would seem that the best way to treat a doubtful record is to give it publicity in some reliable journal and someone will make it his business to supply the information that is lacking!

The Subspecies of the Oregon Jay. By H. S. Swarth.

Bird Notes from Forrester Island, Alaska. By George Willett.

Seven New or Noteworthy Birds from East Central California. By Joseph Grinnell.—Two forms are described as new; *Sitta carolinensis tenuissima* (p. 88) from the Panamint Mountains and *Hylocichla guttata polionota* (p. 89), from the White Mountains.

The Condor. XX, No. 3. May-June, 1918.

The Short-eared Owl in Saskatchewan. By Walter A. Goelitz.

Notes on the Nesting of the White-throated Swift in Colorado. By W. C. Bradbury.—An excellent account with numerous photographs of habitat, etc.

A Return to the Dakota Lake Region. By Florence M. Bailey.— Birds of the Unbroken Prairie.

Costa's Hummingbird — Its Type Locality, Early History and Name. By T. S. Palmer.— A valuable historical article showing that the type must have been taken at Magdalena Bay, Lower California.

The Distribution of the Subspecies of the Brown Towhee (*Pipilo crissalis*). By H. S. Swarth. A valuable resume.

The Wilson Bulletin. Vol. XXX, No. 1. March, 1918.

A Strange Case of Hybridism. By F. C. Lincoln.— Prairie Chicken and Sharp-tailed Grouse. The author will find two similar hybrids described in early volumes of the 'Nuttall Bulletin' and 'The Auk.'

Birds Observed near Minco, Central Oklahoma. By Alexander Wetmore.

Louisiana Bird Refuges. By Alfred M. Bailey.

Harris Hawks in Ohio. By Thomas M. Earle.

The Oologist. XXXV, No. 6. June, 1918.

Notes on Birds Observed at and near St. Teresa, James Island, Florida, in the Summer of 1901. By R. W. Williams.— An annotated list of 59 species.

Observations of Swainson's Warbler. By A. J. Kirn.— Breeding at Copan, Washington Co., Oklahoma.

The Ibis. X Series, VI, No. 2. April, 1918.

On Birds Recently Collected in Siam. Part II. Passeres. By C. Boden Kloss. Concluded.— The following are described as new: *Volucivora koratensis* (p. 193) East Siam; *Chloropsis aurifrons inornatus* (p. 198), East Siam; *Otocompsa flaviventris minor* (p. 200) S. W. Siam; *Mixornis rubricapilla connectens* (p. 206); Lat. 10 N., Siam; *Dicaeum cruentatum siamensis* (p. 216), E. Siam; *Chalcoparia singalensis koratensis* (p. 218) E. Siam; *Dicrurus annectens siamensis* (p. 226); Koh Lak, S. W. Siam.

Some Additions and Corrections to the B. O. U. List of British Birds. By the Committee.

A Note on the Structure of the Feather. By John S. Gladstone.— Structure of the 'tegmen' or ventral ridge of the feather ramus.

The Birds of the Isle of May: A Migration Study. By Evelyn V. Baxter and Leonora J. Rintoul.— Valuable data on the relation of migration to winds, and full list of species observed.

Notes on Some Birds of the Bessarabian Steppe. By Maud D. Haviland.

Further Notes on the Birds of Macedonia. By Alexander G. L. Sladen.

Bulletin of the British Ornithologists' Club. CCXXXI. March 4, 1918.

Mr. W. L. Sclater described the following: *Milvago chimango temucoensis* (p. 43), Palal, South Chile; *Micrastur plumbeus* (p. 44), Carondelet, Esmeraldas, Ecuador; and *Geranospiza niger balzarensis* (p. 45), Balzar Mts., Ecuador.

Mr. Charles Chubb described the following: *Grallaria punensis* (p. 47), South Peru; *Corythopsis torquata sarayacuensis* (p. 48), Sarayacu, Ecuador; *Aramides cajanca salmoni* (p. 48), Antioquia, Colombia.

Mr. G. M. Mathews described: *Pomatostomus ruficeps parsonsi* (p. 48), Pungonda, S. Australia.

Bulletin of the British Ornithologists' Club. CCXXXII. April 2, 1918.

Mr. P. F. Bunyard described the eggs and down of *Nyroca nyroca*.

Mr. Charles Chubb described as new: *Planesticus fredericki* (p. 53), Bartica, British Guiana; *P. fumigatus abariensis* (p. 53), Abary River, British Guiana and *P. f. ochro-fulvescens* (p. 54), Trinidad.

Bulletin of the British Ornithologists' Club. CCXXXIII. April 30, 1918.

Dr. Hartert described five new subspecies of *Rhipidura* and an Oriole, *O. luteolus thaiaceus* (p. 63), the latter from Siam.

S. Clark described a new Pigeon from British Somaliland, *Columba oliviae* (p. 61).

E. C. Stuart Baker described *Garrulax moniliger fuscata* (p. 64), Tavoy, Burma; *Graucalus macei siamensis* (p. 69), Siam, and *Aethiopsar fuscus infuscatus* (p. 70), Lower Chindwin.

British Birds. XI, No. 10. March, 1918.

Notes on the Kingfisher (*Alcedo ispida ispida*). By W. Rowan.

A Note on the Nesting of the Swallow. By J. H. Owen—Important notes on the appearance and development of the young, nestling period etc.

The Moults and Sequence of Plumages of the British Waders. By Annie C. Jackson.—The Knot and Dunlin.

British Birds. XI, No. 11. April, 1918.

Field Notes on the Marsh Warbler. By Lieut. D. H. Meares—With colored plate.

Ornithological Notes from Norfolk for 1917. By J. H. Gurney.

British Birds. XI, No. 12. May, 1918.

The Effect of the Winter of 1916–1917 on Our Resident Birds. By F. R. C. Jourdain.

The "British Birds" Marking Scheme. Progress for 1917. By H. F. Witherby.

Avicultural Magazine. IX, No. 4. February, 1918.

The White Pelicans of Oregon. By Mrs. C. E. Maud.—On Klamath Lake.

Some American Quails. By P. A. Pichot.—Scaled and Massena Quails and Bobwhite in captivity.

The Breeding of the Mexican Black-breasted Quail (*Colinus pectoralis*). By W. S. Baily.

Birds of the Gambia. By E. Hopkinson.

The Pigeon Hollandais. By Graham Renshaw.—An account of the known specimens of the extinct *Alectroenas nitidissima*.

The Emu. XVII, Part 4. April, 1918.

Notes on North-western Birds. By F. L. Whitlock.

Ornithological Notes from North Queensland. By Dr. W. Macgillivray. Part III.—Concludes this valuable annotated list.

Alike in Difference. By E. J. Banfield.— Migration notes on the Nutmeg Pigeon and Metallic Starling.

Further Notes on Cormorants, their Food, Temperatures &c. By Capt. S. A. White.

The Ground Parrot (*Pezoporus formosus*). By A. H. E. Mattingley.

Notes on Some of the Birds met with in the Neighborhood of Pungonda. By E. Ashby.

Revue Francaise d'Ornithologie. No. 105. January, 1918. [In French].

On a Small Collection of Birds from French West Africa. By A. Mene-gaux.

Revue Francaise d'Ornithologie. No. 107. March, 1918.

The Embryonic Life of the Ostrich. By M. Aubry.— Illustrated.

On *Rhamphocorys clot-bey*. By P. Bede.

Ardea. VI, Nos. 3-4. December, 1917. [In Dutch.]

Ornithological Observations in Holland. By E. D. Van Oort.

Results of Bird-ringing at the Leyden Museum. By E. D. Van Oort.

El Hornero. I, No. 1. October, 1917. [In Spanish.]

The Ornithological Society of La Plata.

The Swifts of the Republic of Argentina. By R. Dabbene.

Some Birds of Puerto Deseado, Patagonia. By M. Doello-Jurado.

Formation of the 'Gabinete del Rey' in 1769. By Felix F. Outes.

Ornithological Reflections. By Manuel Selva.— On classification according to habitat.

Some Notes on a Collection of Birds from the Island of Martin Garcia. By R. Dabbene.

Ornithological Articles in Other Journals.¹

MacMillan, Donald B. Food Supply of the Smith Sound Eskimos. (Amer. Mus. Journal March, 1918.) — Data on the use of birds and eggs.

Roosevelt, Theodore. Common Sense and Animal Coloration. (*Ibid.*)

Lang, Herbert and **Chapin**, James P. Nesting Habits of the African Hornbill. (*Ibid.*, April, 1918.) — An interesting account with illustrations.

Forbush, Edward H. The Heath Hen of Martha's Vineyard. (*Ibid.*) — Illustrated with photographs by George W. Field.

Vreeland, Frederick K. How a Ruffed Grouse Drums. (Bull. Amer. Game Protective Asso., January, 1918.) — An excellent series of photographs of the bird 'in action.'

¹ Some of these journals are received in exchange, others are examined in the library of the Academy of Natural Sciences of Philadelphia. The Editor is under obligations to Mr. J. A. G. Rehn for a list of ornithological articles contained in the accessions to the library from week to week.